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AUTHOR Ruyle, Eugene E.
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ABSTRACT

This paper attempts to clarify the Marxian concept of socialism and concludes that social evolution will culminate in a world socialist system. By viewing sociocultural systems from an ecological perspective it is argued that individuals tend to maximize their consumption of labor energy, and minimize their own expenditure of labor energy. This minimax principle underlies the succession of human ecosystems: the process of the emergence, development, and overthrow of class rule. The earliest social order was the primitive communism of the hunting and gathering world, marked by an equal obligation of all in labor and consumption. As this classless society became large and sedentary, a ruling class emerged and feudalism followed. However, in developing the productive forces of society, the feudal rulers generated a new ruling class, the bourgeoisie, and capitalism soon replaced feudalism. According to the Marxian analysis of capitalism, it too will pave the way for a new social order. Unemployment, poverty, crime, racism, freedom of thought, critical social science, free press, and democratic institutions will give the working class both the reason and the power to overthrow capitalism. Finally, because socialism will provide roughly equal levels of consumption and the free development of individual potential, it will become a lasting social order. (Author/JK)

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THE FUTURE AS ANTHROPOLOGY

SOCIALISM AS A HUMAN ECOLOGICAL CLIMAX

by

EUGENE E. RUYLE

Department of Anthropology
California State University, Long Beach
Long Beach, California 90840

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INTRODUCTION

When Marx and Engels wrote the Communist Manifesto, the idea of socialism was pretty much confined to a few small sects in Western Europe. Today, fully one-third of our species lives in nations that are consciously attempting to build socialism, and Marxian socialism is the dominant ideology of resistence in the remainder of the world. It seems reasonable, therefore, to suspect that we are witnessing a world historical event of the greatest significance for humanity: the end of class rule and the emergence of a classless, world socialist society. The facts that this transition is as yet incomplete, and that existing proletarian states exhibit a variety of shortcomings, are not surprising when it is recalled that capitalism was itself built through centuries of struggle, war, and revolution.

It is frequently said that anthropologists should work in the interests of "their" people (see, for example, Weaver 1973). It is also often argued that these interests should be defined by the "natives" themselves. In view of these feelings, it seems clear that anthropologists should become more concerned with this new socialist order which is struggling to be born. Just as the earlier misunderstanding and denigration of "primitive" and "savage" peoples stimulated anthropological research into alien life styles, so the present systematic misunderstanding and denigration of Communist and revolutionary movements should stimulate anthropological research to clarify the issues presently faced by our species.

Such research should include studies of the efforts of contemporary

proletarian states to build socialism and of the struggles of oppressed peoples in the neocolonial world to overthrow imperialism. Equally importantly, however, attention should be devoted to the theoretical clarification of the idea of socialism itself. Just what is this socialism which is so compelling an idea in the contemporary world?

This paper attempts to clarify the Marxian concept of socialism by placing it in a modern, ecological idiom and viewing social evolution as a form of ecological succession which will culminate in a world socialist system. Marxian analysis has become increasingly fashionable in recent years, but the real appeal of Marxism lies not only in its radical critique of the world the bourgeoisie built, but more importantly in the manner in which it shows how the dialectic of the capitalist present leads inexorably to the socialist future. Before proceeding, let me make two points of clarification.

First, socialism should be understood as a classless world social order in which the means of production are socially owned and democratically managed to produce for use rather than private profit. Clearly, existing proletarian states such as Russia and China, do not conform to this conception, nor do the so-called "mixed economies." Socialism does not exist at the present, except as an idea and a potentiality inherent in capitalism

Secondly, if socialism is indeed possible, this fact is of tremendous importance to every member of our species. But this is a complex topic on which intelligent people can honestly disagree, and discussion of this important topic must be based on the greatest possible degree of freedom, which a full consideration of all reasonable opinions. For if socialism is not possible, if it is simply an ideological weapon used to deceive by a new group of predacious would-be rulers, then this would also be of the greatest significance. I will of course present my own views as forcefully and persuasively as possible.

This may appear to be a form of special pleading, or it may appear to be doctrinaire and visionary. If this is so, perhaps it will stimulate more intelligent discussion on this important topic by voices more capable than my own.

SOCIOCULTURAL SYSTEMS IN ECOLOGICAL PERSPECTIVE

It is useful to adopt a natural history approach and view human societies as embedded in more inclusive ecosystems, composed of matter, energy, and information (Odum 1971; Richardson and McEvoy 1976). Ecosystems may be studied from a variety of perspectives.

From a synecological, or systemic, perspective, an ecosystem is composed of plant and animal communities interacting with abiotic elements to maintain a flow of energy through, and a cycling of matter within, the system. Within the functioning of the total system, each species plays a distinctive role, its *ecological niche*. All species interact with, and influence, all the others, but this influence is not equal. Frequently, one or a few species, the *ecological dominants*, will exert a major controlling influence on the system as a whole. The ecosystem is kept in continual motion by the flow of energy through the system. This motion, in turn, produces both stability and change in the system itself. We may distinguish between change in the components of the system, and change in the system itself.

Change within the component species making up an ecosystem includes both developmental change within the life cycle of the species in question, and evolutionary change. The latter, genetic evolution, is a matter of change in the statistical frequency of genetic information in the gene pool of the species, brought about by mutation, natural selection, and drift.

Above the species level, there are two sorts of changes. One, which we may call ecosystemic evolution, results from the tendency, at the species level, to occupy unoccupied niches. Since the advantages of occupying a previously unoccupied niche are very great, natural selection favors those variations which are best able to exploit the resources of the new niche. This alters the selective pressures operating on the portion of the population which has occupied the new niche, and this, in turn, leads to niche separation, specialization, and speciation. The tendency toward complexity in the evolution of ecosystems, then, is a logical concomitant of natural selection at the species level.

Another sort of ecosystemic change is ecological succession, in which there are regular changes in the makeup of the plant and animal communities composing an ecosystem. Such ecological succession can be seen, for example, if one clears land in the southeastern United States. The grasses which florish in the first few years are replaced by a mixed grass-shrub community which lasts for about 20 years. Gradually, however, the competitive advantage which longer lived pine trees have in an open, sunny environment leads to a pine forest community from which the grasses and shrubs disappear. The pines, however, in achieving a position of ecological dominance, themselves create the conditions under which they can no longer reproduce, since the competitive advantage of pines in an open environment is lost in the shade of the mature pines. Here, hardwoods such as oak and hickory have a competitive advantage and as the first generation of pine trees dies off, their place is taken by oak and hickory. Since the oak and hickory can reproduce in their own shade, the oak history forest represents a mature, stable system, an *ecological climax* which persists indefinitely unless altered by geological or climatic change.

In addition to the synecological study of ecosystems, it is also useful for anthropological science to study ecosystems from an autecological framework, that is, from the standpoint of a single species, in our case, *Homo sapiens*. Since human populations are almost universally ecological dominants, such a study obviously has relevance for understanding the system as a whole, as well. We may turn, then, to look at the elements of an autecological framework for understanding human society, a framework that not only sees society as embedded in the larger ecosystem, but also attempts to see the internal features of human societies in ecological terms.[1]

As noted above, ecosystems are composed of three sorts of entities, matter, energy, and information. The material entities include the human *population* and the *environment*. Within this environment, the human population occupies a definite *ecological niche*. The ecological niche, viewed in synecological terms, is the place of the population in the total functioning of the ecosystem. From an autecological perspective, the ecological niche grows out of the specific needs of the population, for certain kinds of food, shelter, and so forth. The ecological niche, then, is made up of those environmental features which the population requires to satisfy these needs. Such environmental objects are *use values*, which, in human populations, is a rather broad category. The concept of use value includes: (1) *natural use values*, such as air and water; (2) *resources*, things which are potentially use values but which must be transformed into culturally acceptable use values through the expenditure of human labor energy; (3) *consumers' goods*, use values which have been produced by human labor and which are used directly to satisfy human needs; and (4) the *means of production*, use values which are not used directly to satisfy human needs, but are used in the process of producing other use values. In addition to use values, the environment also contains *hazards*, anything which threatens

the well-being of the members of the population.

Thermodynamic entities include the *bioenergy system*, or the food energy resources upon which the population depends, the *ethnoenergy system*, or the manner in which human energy is expended in the satisfaction of the needs of the members of the population, and the *auxiliary energy system*, or extrasomatic energy (draft animals, fossil fuels) which are used instrumentally by members of the population. These material and thermodynamic entities, taken together, constitute the *material conditions of life*.

The informational sphere includes both *genetic* and *learned information*. The learned information may be acquired through *situational learning*, *social learning*, and *symbolic learning*. The totality of non-genetic information, including modal personality, basic values, world view, folk taxonomies, cognitive maps, kinship terminologies, behavioral rules, and technological strategies, existing in the minds of all the members of the population constitutes the *cultural pool*. The expression of this information in verbal and other symbolic behavior constitutes the *manifest cultural pool*.

These various components of human ecological systems are always interacting, and in the functioning of the system, there are a variety of cause and effect relationships between the various components of the system, but these need not be considered in detail here.

Human cultural evolution exhibits many of the characteristics both of genetic evolution (in that it involves statistical changes in the frequency of different sorts of information in the cultural pool of the population), and of ecosystemic evolution (in that it involves expansion and increased complexity due to niche filling). The analogy I would like to pursue in the present discussion, however, is that between human cultural evolution and ecological succession. To do so, let me step back and look again at the processes of change in natural (i.e., non-cultural) ecosystems.

As noted earlier, the entire ecosystem, including its human component, is kept in motion by the continual flow of energy through the system as green plants harness solar energy, convert it into plant matter, which in turn is harnessed by herbivores, who in turn are eaten by carnivores, and so on. The flow of energy through the ecosystem, then, is effected by various organisms who eat, and are eaten by, other organisms.

Life itself may be viewed as a struggle for free energy, as a temporary reversal of the Second Law of Thermodynamics, characterized by the incorporation of greater and greater amounts of energy into more and more complex biological systems. In this perspective, we may follow Lotka (1945) and see evolution as operating according to a maximization principle, in which natural selection favors genes which facilitate the harnessing of energy. Natural selection also favors genes which contribute to greater efficiency in behavior or biological structure. Combining these, we may see a minimaxing principle as a major explanatory device in the understanding of biological evolution: within the synthetic theory of bio-evolution, traits are explained by showing how they contribute to more complete utilization of environmental energy resources and toward more efficient use of available energy. The minimaxing tendencies of different species may operate in opposite directions (wolves becoming more efficient predators while deer becoming more efficient at escaping from wolves) or in complementary directions, leading toward cooperation between species.

This necessarily truncated discussion of the thermodynamic aspects of the "struggle for existence" is intended less to shed light on biological evolution than to introduce a termodynamic conception of cultural evolution. All animal populations are dependent upon the flow of bioenergy through the ecosystem and also on the expenditure of their own ethnoenergy in efforts to harness bioenergy, escape from predators, reproduce, and so on. Human populations share this pan-animal dependence on bioenergetic flow and ethnoenergetic expenditure, but human

populations are also dependent upon a particular form of ethnoenergetic expenditure, labor. All human populations are dependent upon the expenditure of human labor energy into systems of production that transform environmental resources into culturally acceptable use values. We may speak of the labor energy expended in producing use values as being embodied in these use values, and when the goods are consumed, we may speak of the consumption of a definite amount of labor energy. It is important to distinguish this deep flow of ethnoenergy, in which labor energy flows through productive systems, into use values, and then back again into the human population, from the surface flows in day-to-day activity. The latter may be seen in all animal populations, the former is the defining characteristic of humanity, for, as I have argued elsewhere, the unique characteristics of our species, our bipedalism, our abilities to reason and converse, even our religious capabilities, are all adaptations to a way of life based on social production (Ruyle 1977c). Several points about this deep structure of energy flows needs to be made.

First of all, all *human* life, and all human beings, are dependent upon this deep flow of energy. "Even when the sensuous world is reduced to a minimum, to a stick," observed Marx and Engels (1939:16), "it presupposes the action of producing the stick." Further, few human beings produce more than a small percentage of the actual use value they consume, and few consume more than a small percentage of the use values they produce. This means that human production and consumption are social activities, and that the deep structure of energy flow constitutes an essential substratum of human social life which is lacking in the social life of monkeys and apes. It is through this deep thermodynamic structure that human beings satisfy their needs for food, clothing, shelter, and any other needs of a material sort.

Now, just as life itself may be viewed as a struggle for free bioenergy, so human life may be viewed as a "struggle" for the labor ethnoenergy embodied

in use values. A major aspect of all human life is the withdrawal of social labor, as embodied in use values, from the social product. Since use values, by definition, satisfy human needs, and since for most of our species, basic needs are not fully met, it follows that there is a general tendency to maximize control over need satisfying use values, or, in thermodynamic terms, to maximize control over the ethnoenergy that provides need-satisfaction. Further, to the extent that expenditures of labor energy are not in themselves satisfying, there will be a tendency to minimize ones own expenditure of labor energy. Consequently, we may speak of a minimax principle in human behavior, such that individuals tend to maximize their control over, or consumption of, labor energy, and minimize their own expenditure of labor energy.

A few points of clarification about this minimax tendency should be noted. First of all, the idea of a minimax tendency does not depend upon the idea that human needs are insatiable, for I believe this idea to be erroneous (cf. Mandel 1970:660-664). All that is needed for the principle to be operative is a desire for a standard of living 10 percent higher than the existing one. Secondly, it is not assumed that all human labor is inherently unsatisfying, for I believe that this idea is also erroneous, and that labor provides profound satisfaction to the human animal. But again, all that is needed is a desire to reduce labor output by 10 percent, a reasonable enough assumption for most of human history. Third, all members of the population need not exhibit the minimax tendency equally strongly, for clearly there is individual variation in this as well as all other personality characteristics. Fourth, in speaking of a "struggle" for labor energy, I do not mean to imply that everyone is a social imperialist, ruthlessly satisfying his own needs in opposition to all others, for need satisfaction can usually be maximized by cooperation rather than competition. Finally, it is not claimed that minimaxing explains everything.

I will indeed argue that the most significant aspects of cultural evolution are inexplicable without reference to something like a minimaxing principle, but this does not mean that I feel that minimaxing is the *only* principle in operation.

This concept of a minimaxing principle underlying human behavior is quite similar to, if not identical with, the concept of enlightened self-interest of classical political economy. Indeed, the concept of a deep structure of energy flow delineates an area of inquiry roughly coterminous with that of political economy, which "studies the social (inter-personal) relations of production and distribution. What these relations are, how they change, and their place in the totality of social relations" is the subject matter of political economy (Sweezy 1968:3).

There are a number of areas in which this minimax tendency has extremely important consequences. First of all, it underlies the progressive development of the forces of social production. There are two aspects to this development. First, it is a movement toward greater efficiency; more use values can be produced per unit of labor expended. Second, there is an emergent quality, in that new kinds of use values can be produced.

Another consequence of the minimax tendency is closely related to the first, and has to do with the *relations* of production. Clearly, the individual can maximize his own benefits by *cooperation* in production, which allows greater efficiency and also allows more different kinds of things to be done, by the *division of labor*, which permits specialization and greater efficiency, and by *reciprocity*, the mutual sharing of the products of labor. The result is the emergence of systems of mutual interdependence. Participation in a system of social production is in accord with the enlightened self-interest of the individual, because such participation enables the individual to maximize

his benefits and minimize his energy costs. In speaking here of the "enlightened self-interest of the individual", I do not mean to imply that each individual enters the system with a well formed idea of what his "interests" are. This is obviously not the case. People enter social systems as infants, uninformed individuals who are molded by society. Such molding, however, takes place within fairly narrow limits, limits which approximate quite closely what an outside observer would call "enlightened self-interest".

Another consequence of the minimax tendency is the emergence of exploitation, and of a predatory niche involving living by exploiting the labor of others. This requires some explanation.

When people expend energy in production, and consume energy in the form of use values, they are doing more than interacting with the environment. They are interacting with each other. The flow of labor energy from producer into use values and then into consumers is a flow of energy from producers to consumers. Thermodynamic analysis, therefore, provides a way of measuring quantitatively the social relations of production and consumption. This may be done most parsimoniously by simply measuring the amount of energy a given individual,group, or class expends in production (E), and the amount of energy the same individual, group, or class consumes in the form of use values (I). If the latter is more than the former, we may speak of surplus (S = I - E). This surplus must come from somewhere and, since no new energy is *created* by production, it can only come from other members of the population. The surplus accruing to one part of the population, therefore, must be extracted from other members of the population, where it appears as a deficit, or negative surplus. The extraction of surplus is in accord with the minimaxing tendency of those who receive the surplus, but it runs counter to the minimaxing tendencies of those from whom the surplus is extracted. On theoretical grounds, therefore, we would expect that the differential flow of energy to the surplus extracting

portion of the population would be associated with conflict. And this is indeed the case. I know of no case where an appreciable amount of surplus is extracted from a population without the use of force by the surplus extracting population. In such situations, therefore, we are justified in speaking of *exploitation*, which we may define as the forcible extraction of surplus from a class of producers by a class of non-producers.

Earlier, mention was made of the concept of ecological niche, or the manner in which a given population is attached to the flow of energy through an ecosystem. It is fruitful, I think, to extend this concept to classes within human populations, and speak of a *socio-ecological niche* as the manner in which a given class is attached to the flow of labor energy through the human ecological system. There are myriad different possibilities, but it is important to recognize three fundamentally different kinds of socio-ecological niches. First, there is the *basic producer niche*, which involves expending energy into a productive system and withdrawing an equivalent amount of energy in the form of use values (E = I). Second, there is what we may call an *exploiter niche* (E < I), which involves extracting energy from a productive system without a corresponding labor expenditure into the system. Finally, there is the *exploited producer niche* (E > I), which involves expending energy into a system and withdrawing less energy, the surplus going to a predacious ruling class in the exploiter niche.

The basic producer niche was, until about five or ten thousand years ago, the only niche occupied by members of our species. It is now occupied by small populations of hunters and gatherers and horticulturists on the geographical periphery of civilization. The predator niche is occupied by ruling classes and their retainers in historic and contemporary civilizations. The exploited producer niche is occupied by peasants, serfs, and slaves in historic civilizations and by workers in contemporary society.

We shall examine the predator niche and its occupants in greater detail shortly. Certain points may be made, however, at this time. The flow of energy to the ruling class results from the efforts of the members of the ruling class who expend energy not into the productive system but rather into an exploitative system made up of definite exploitative techniques and definite institutions of violence and though control. This exploitative system, then, is for the ruling class the functional equivalent of the productive system for a population of basic producers; it is consciously manipulated by the rulers for their own ends. These ends include a much higher return on energy expended in exploitation than that expended in production by the direct producers, and a much higher per capita consumption of labor energy for the exploiters. Movement into the exploiter niche, then, is in accord with the minimaxing principle.[2] Since the rulers are consciously manipulating the system for their own ends (although they do not necessarily conceptualize this as exploitation) we are justified in terming such a system as a system of class rule. However, the exploited producing classes resist exploitation in various ways, so that class struggle between exploiter and exploited is a ubiquitous feature of all systems of class rule.

SOCIOCULTURAL EVOLUTION AS ECOLOGICAL SUCCESSION

The operation of the minimax principle, then underlies the major trends in human cultural evolution: the progressive development of society's productive forces and the emergence of systems of exploitation and class struggle. The former of these processes occurs in all social systems, although the strength varies in different types of social structures. The latter is manifested only in particular kinds of ecological situations, namely in large, dense

populations of an intermediate range of cultural development. Class rule does not appear among hunters and gatherers, because the nature of the productive system has definite barriers against the emergence of exploitation. Class rule will disappear in the future when analygous barriers are erected against the continuation of exploitation. This process of the emergence, development, and overthrow of class rule forms the foundation for the succession of human ecological types, each marked by distinctive productive systems, social structures, and ideological features or complexes.

In broad outline, we may distinguish four types of human ecosystems, corresponding to the four epochs of human history: primitive communism, feudalism, the world capitalist system, and the world socialist system.

The earliest social order of our species was the primitive communism of the hunting and gathering world, marked by an equal obligation of all to participate in social labor, by a rough equality in consumption, and by unimpeded access to strategic resources, to violence, and to the sacred and supernatural. Social order was rooted in a common dependence on a system of social production. Primitive communism endured, no doubt, for millions of years, and it was during these millions of years of life within a primitive communist social order that humanity evolved its present morphological and psychological nature characteristics.

There is strong resistence among anthropologists to the use of the term "primitive communism" to refer to the egalitarian social orders of hunters and gatherers, and, to the best of my knowledge, Leacock is about the only major American anthropologist who is willing to use the term (1972). Several points of clarification, then, need to be made concerning the concept.

First, the adjective "primitive" is used intentionally, with a dual meaning. Primitive communism is "primitive" in the sense of "original". This was the original social order of our species, enduring as the only social order

from Australopithecine times to the emergence of the earliest systems of class rule about 10,000 years ago.

Primitive communism is primitive also in the sense of rudimentary and undeveloped. This was by no means a perfect social order. The forces of social production were weakly developed and life, while not quite "nasty, brutish, and short" left much to be desired from the standpoint of such things as infant mortality, life expectancy, and care of the sick and aged. Further, although society was egalitarian in the sense that everyone had an equal obligation to participate in social production and an equal claim on the social product, there were also sex and age hierarchies marked by exploitation and oppression. Further, although private property in the bourgeois sense did not exist, and although there was unimpeded access to the strategic resources, articles of consumption were owned as personal possessions.

Finally, the primitive commune was not necessarily inhabited by "noble savages", although there was probably a higher incidence of human decency in primitive communism than in later systems of class rule. Consequently, conflicts and quarrels did occur, most typically between males over females (who were important sources of labor). Conflict resolving mechanisms were not always sufficient to keep these from erupting into violence. But this violence was between equals, and not the one sided violence characteristic of class rule.

Balancing these negative features were positive ones. The gross inequalities in conditions of life and in opportunities for self-development, the domination of one person by another, repressive institutions such as prisons, police, the State, and the Church which characterize later systems of class rule, were lacking in primitive communism. Many writers have also remarked on the "liberty, equality, and fraternity" of primitive communism, on the high values placed on equality, sharing, freedom, and cooperation (Leacock 1972; Lee 1969; Diamond 1974; Morgan 1964; Lenski 1970).

Primitive communism is a social order occuring typically among hunters and gatherers. Although it also occurs among some horticulturists (Morgan's Iroquois, the type example of primitive communism, were already at the horticulturist stage), the Neolithic Revolution and the transition to food production created conditions undermining the primitive communism of the hunting and gatherering world. The transition to horticulture was accompanied by what Lenski called an "ethical regression", marked by an increased incidence of warfare, inequality, headhunting, scalp-taking, cannibalism, and other "barbaric" practices (1970:235-236).

This, then, was the era of the breaking-up of the primitive commune and the emergence of a new social order, class rule. As populations became large and sedentary, the bonds of interdependence that held together the primitive commune weakened, and a new socioecological niche opened, that of predation.

In contrast to the rough equality of consumption in primitive communism, stratified population societies are marked by gross differentials in access to the social product. The last five thousand years of human evolution have been characterized by the existence of classes which, although their members do not directly participate in a productive system through the expenditure of their own labor power, are nevertheless abundantly provided with the good things of life. In all class-structured societies, we know that those classes (slaves, serfs, peasants, workers) that contribute the greatest amount of labor to the productive system receive the least, while those (slavemasters, nobles, landlords, capitalists) that contribute the least amount of labor receive the most. How do we account for this peculiar situation?

The emergence of classes that do not directly participate in production is simultaneous with the emergence of special instruments of violence and thought

control that are staffed and/or controlled by those who enjoy the newly emerging special privileges and wealth. From a historical materialist standpoint it is essential that we regard the wealth and privileges of certain classes as resulting from the activity of individuals. We are inescapably led, then, to the conclusion that the differentials in wealth and privileges of certain classes are a result of the efforts of those classes. These efforts take the form of expenditures of energy in exploitative systems that pump economic surplus out of the direct producers and into the exploiting classes that protect their resulting wealth and privileges.

Just as one can see a definite system of production supporting any human population, so, wherever one sees gross inequalities in standard of living and wealth, one can also see a definite system of exploitation controlled by those enjoying the highest standard of living and the greatest wealth. Systems of exploitation are as variable as systems of production, but all share certain features. There are, first the *exploitative techniques*, the precise instrumentalities through which economic surplus is pumped out of the direct producers: slavery, plunder, tribute, rent, taxation, usury, and various forms of unequal exchange. Second, there is the *State*, an organization which monopolizes violence and is thereby able to physically coerce the exploited population. Third, there is the *Church*, an organization which controls access to the sacred and supernatural and is thereby able to control the minds of the exploited population. These elements of the exploitative system may be institutionalized separately, as in industrial societies such as the United States and the Soviet Union, or they may be integrated into a single unitary institution, as in the early Bronze Age. The precise ensemble of exploitative techniques, together with the manner in which State-Church elements are institutionalized, constitutes a historical *mode of exploitation*.

The State and the Church, then, form twin agencies of oppression and thought control whose purpose is to support and legitimate the exploitation supporting the ruling class. But in addition to their repressive role, these agencies also carry out a variety of socially beneficial governmental functions.[3]

Generally speaking, the State carries on the following functions in developed class societies: waging war, suppressing class struggle, protecting private property, punishment of theft, constructing and maintaining irrigation works, state monopolies of key economic resources, regulation of markets, standardization of weights and measures, coinage of money, maintaining roads and controlling education.

The Church is often viewed as a religious institution, but it is also an important agency of social control. The State subdues the bodies of human beings, the Church their souls.[4] White (1959:323-328) provides abundant documentation of the role of the Church in subduing the souls of human beings by 1) supporting the state in war, in supressing class struggle and protecting private property, and 2) "keeping the subordinate class at home obedient and docile."

The Church, then plays a very important role in legitimating the system by showing the social order to be an extension of or in accordance with the natural and sacred orders. This legitimation has a dual aspect. First, of course, there is the manipulative, thought control aspect in which the content of religious ideology is consciously shaped in order to support the system. Second, and also very important, is the legitimation of the system to the rulers themselves.

The exploitative system is the instrumentality through which a predator-prey relationship is established within the human species, only here the stakes are human labor energy rather than energy locked up in animal flesh. The

differentials of wealth and prestige which emerge from this predatory relationship simultaneously reflect and legitimize the differential consumption of labor energy by predator and prey. Once the predatory relationship is established, the system of exploitation supporting it becomes larger and more complex, with a complex division of labor developing in both the sphere of production (between agricultural workers and workers in the industrial arts, metallurgy, textiles, pottery, and so forth) and in the sphere of exploitation (warriors, priests, scribes, etc.). The result is an elaboration of occupations and statuses among different kinds of producers, exploiters, parasitic groups, and so on. This predatory relationship generates a division of the population into classes, which are defined by their relationship to the underlying flow of labor energy through the population.

The exploitative system supporting a predatory ruling class fulfills the same function vis-a-vis the ruling class that the productive system fulfills for a band of hunters and gatherers, that is, it is consciously manipulated in order to provide them with the use values essential for human life. It does so, however, on a scale far surpassing anything in the hunting and gathering world.

Once established, this exploitative system follows its own evolutionary trajectory, governed by a number of forces. First of all, because of the mirimax tendency, it tends to become more efficient at extracting surplus, and tends to become larger and capable of extracting more surplus from a larger population. This tendency runs parallel and complementary to the progressive development of the underlying productive system, a development to which the exploitative system must be adapted. However, the development of production occurs within the constraints of the system of class rule, so that the relationship between the mode of production and the mode of exploitation is a dialectical one.

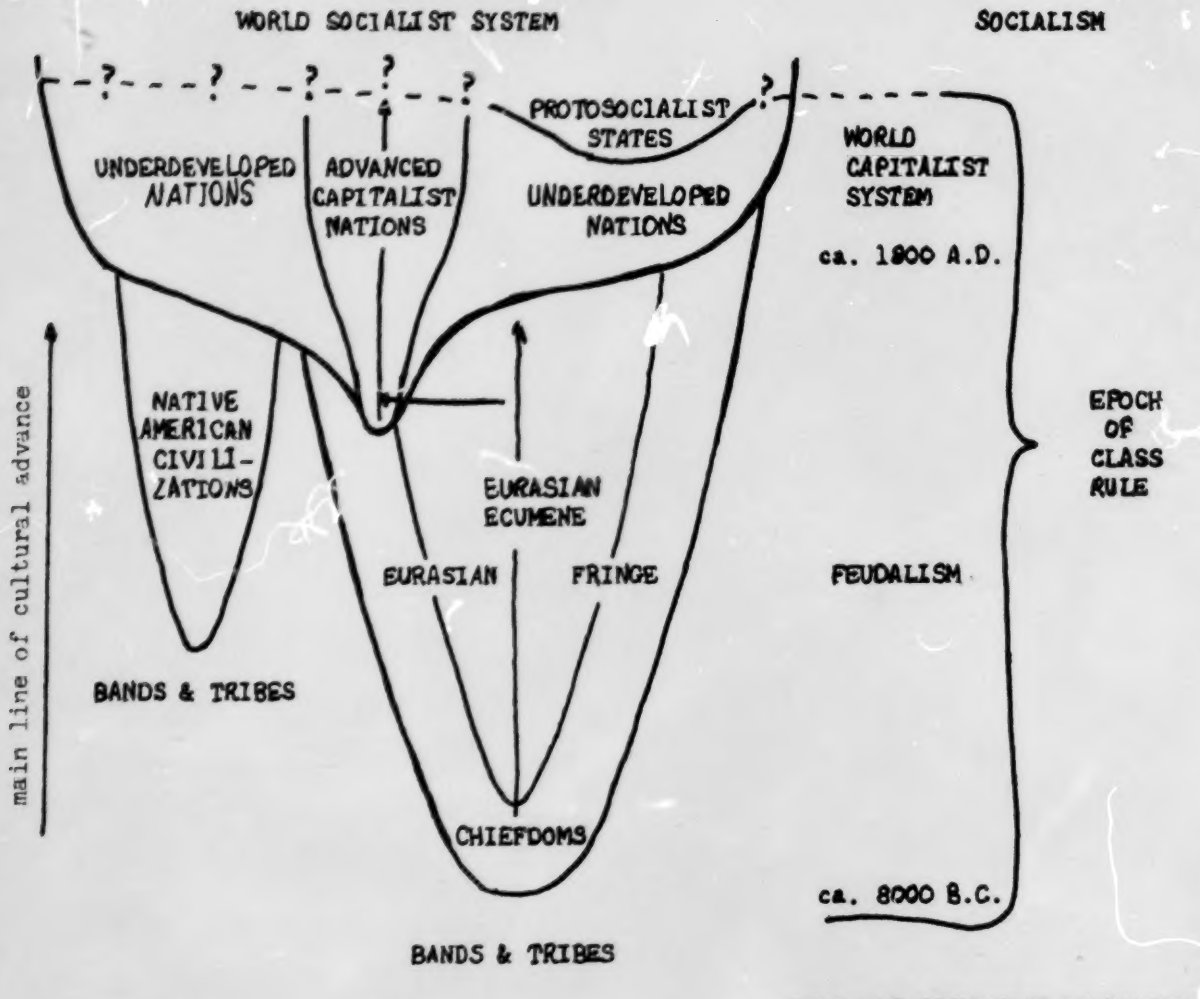
Another important force underlying the evolution of systems of class rule is class struggle. Exploitative operates not on nature, but on human beings, as such, it generates resistence. This resistence on the part of the direct producers is in accord with the minimax principle discussed above, and takes a variety of forms, ranging from flight, concealment of production, and petty thievery to organized armed resistence.

Further, the predator niche is attractive to groups outside the system, and nomadic hunters, such as the Aztecs, or nomadic herders, such as the Mongols, pose a continual threat to the occupants of the predator niche. The predator niche, then, is by its very nature, a precarious one.

Under the influence of these selective forces, the exploitative system supporting a ruling class undergoes a more or less regular succession, as small, weak systems are replaced by larger, stronger ones. The details of the evolutionary history of class rule need not be discussed in any detail here, but some of the major features are diagrammed in Figure 1. The main line of cultural development, down to about 1500 A.D., runs through the historic civilizations of what Kroeber called the Eurasian *oikoumenê* (1945). McNeil has noted several phases in the development of the *oikoumenê*, or ecumene, an era of Middle Eastern dominance to 500 B.C., an era of Eurasian cultural balance between the Mediterranean, the Middle East, India, and China from 500 B.C. to 1500 A.D., and the era of Western dominance after 1500 A.D. (1965). In addition, there are peripheral forms: medieval Europe, subsaharan Africa, Southeast Asia and Indonesia, Oceania, and Japan, and a later, parallel, evolutionary development in the New World.

These various precapitalist forms of class rule may be lumped together under the category of feudalism, for they share certain characteristics which distinguish them, as a social type, from capitalism.[5] These characteristics

Figure 1. Evolutionary Taxonomy of Sociocultural Systems.



include, first of all, the exploitative techniques, which include plunder, slavery, serfdom, usury, and mercantile activity, but do not include in any important way, industrial wage labor. Systems of exploitation based on these techniques lack the inherent instability of industrial capitalism, as will be discussed below. Secondly, the ideological systems legitimating feudal rule are also stable, in that the hegenomy of the Church is unchallenged, the dominant value is hierarchy, not equality, and no viable alternative to the system exists, even in thought. As a result, class struggle is within the system, directed toward the elimination of excessive abuses, such as removing unjust rulers or gaining tax relief, and not directed against the system of class rule itself.

The various feudal forms of class rule, then, are not inherently unstable, although there are extra-systemic sources of instability. The ruling classes of feudal societies, however, themselves created the conditions under which they could not longer endure. In establishing stable social orders and in fostering the development of the productive forces of society, the feudal rulers paved the way for a new ruling class, the bourgeoisie, which, as the Communist Manifesto notes, "has played a most revolutionary role in history." This new ruling class has created a radically new social order, and for the first time, brought the entire world together in a single ecosystem.

We must ask, however, whether this ecological succession goes on forever, or is there an end in sight, a mature stable human ecological climax? Is bourgeois society itself such a climax? Are we living at the oak-hickory stage of human evolution, or simply in a pine forest? Perhaps humanity will degrade its own environment and retrogress to a more primitive state, or perhaps even become extinct?

These are weighty questions which cannot be approached in a dogmatic spirit.

Neither can they be intelligently discussed without taking into account the analysis made by Marx a century ago. According to this analysis, the new bourgeois world order, unlike the earlier feudal orders it replaced, is a highly unstable system, rent by powerful contradictions of both a material and an ideological nature. Let us examine some of the more important of these.

CAPITALISM: THE MARXIAN ANALYSIS

Marx's analysis of capitalism is one of the towering achievements of humanity, for Marx laid bare the laws of motion of capitalism and showed how capitalism, as a system of exploitation, generates the social ills which plague bourgeois society: unemployment, poverty, crime, and racism. It is obviously impossible to examine Marx's analysis in any concrete detail, but it may be useful to review some aspects of the analysis in an abstract way (for an introduction to Marx's analysis, see Sweezy 1968), and show how it articulates with the ecological view of social evolution.

Marx's analytic tool, the labor theory of value, fits in well with the ecological framework developed above, for value, in Marx's analysis, is a thermodynamic concept: the amount of socially necessary labor embodied in a commodity. Marxian value analysis, then, represents an ethnoenergetic analysis of capitalism which examines the flows of energy between classes in the process of production and exploitation.

These thermodynamic flows can be seen in Marx's formula for capitalist production, $M - C_1 + C_2 \ldots C' - M'$, in which the capitalist begins with money (M), exchanges this for two sorts of commodities, raw materials and the means of production (C_1), and labor power (C_2), combines these in the labor

process to produce new commodities (C'), which he then sells for money (M'). This formula serves to draw attention to certain essential features of capitalism.

First of all, the profit motive. Since the capitalist begins and ends with money, the sole rationale for this circulation of money is that the second sum of money (M') must be larger than the first (M). This increment of money (M = M' - M) is profit, a form of surplus value, the sole motive force of capitalist production. This makes capitalism quite different from all other productive systems, for profit is an economic category specific to capitalism. In primitive communism or feudalism, production is controlled by the producers themselves in order to produce use values essential for existence; profit simply does not appear as part of the system. In capitalism, production is controlled by the capitalist class for the purpose of producing profit for the capitalist. The production of use values is only a means of attaining this end.

Secondly, the secret of capitalist exploitation. Profit, or surplus value, is a thermodynamic entity, a definite amount of congealed human labor. Energy, however, flows through socioeconomic systems but is not created by them. The energy embodied in profit, therefore, must ultimately come from human labor power. While capitalist profits *may* come either from selling commodities above their value (thus exploiting the buyer) or buying commodities below their value (thus exploiting the seller), the strength of Marx's analysis is that he showed that capitalist exploitation does not *depend* on either of these, that it can occur even when all commodities are exchanging at their proper value. The secret of capitalist exploitation, for Marx, lies in the peculiar nature of one of the commodities purchased by the capitalist, labor power.

Like all other commodities, labor power has both value and use value.

Its value is the amount of socially necessary labor required to produce the goods upon which the worker and his family subsist, say 20 hours per week. The use value of labor power is its ability to labor, to not only reproduce the goods it consumes, but to continue producing for a full work week, say 40 hours. It is this differential between the value and the use value of labor power which is the source of profit in capitalist production.

Looking at this in terms of our earlier discussion of energy flows, we see that the worker's income (I) is 20 hours per week, his output (E) is 40 hours per week, so that 20 hours of surplus (S = I - E = 20 - 40 = -20) is being extracted from the worker each week. This surplus belongs to the capitalist since it was produced by his property, the worker's labor power, and this is the source of profit in capitalist production.

Capitalism, then, like feudalism, is a system of exploitation designed to extract economic surplus from the direct producers. The specific exploitative technique in capitalism, wage labor, has extremely important systemic ramifications which make capitalism strikingly different from feudalism.

Capitalist production presupposes a basic two class division of society between the capitalist class, or bourgeoisie, who own the means of production and live from property income, and the working class, or proletariat, who do not own any productive property and therefore must live from the sale of their labor power. The worker is politically and legally free, but economically he is in bondage. Lacking independent access to the means of production, he is compelled to sell his labor power on the labor market for whatever price it will bring and under whatever conditions may prevail. In order for the system to operate efficiently (efficiently, that is, from the standpoint of producing profits), it is necessary that there be an oversupply of labor power, for this ensures that the terms of the sale of labor power will be favorable to the buyer

rather than the seller. Unemployment, then, or what Marx called the Industrial Reserve Army, is a functional necessity for capitalism, for it keeps wages low, enforces labor discipline, and creates feelings of gratitude and dependence within the class of employed workers, who see their employers as benefactors providing them with a livelihood, rather than as exploiters.

Saying that unemployment is necessary to capitalism does not, of course, explain unemployment. The explanation of unemployment lies in systemic mechanisms within capitalism which serve to maintain unemployment. As unemployment is reduced, and as wages therefore rise, decisive feedback mechanisms come into play which serve to recreate unemployment.

First, there is the introduction of labor saving machinery. As wages rise, employers have a greater incentive to introduce new machines to cut their wage bill. This in turn reduces the demand for labor, and helps recreate the Industrial Reserve Army. Second, increased wages tends to attract workers from outside the system, thereby increasing the supply of labor. Finally, and decisively, there is the capitalist crisis. As wages rise, profits, in the last analysis, must fall. As profits fall, capitalists stop investing and hold their capital in money form to await better business conditions. But if capitalists don't invest, production stops, and workers are thrown out of work, thus replentishing the Industrial Reserve Army, lowering wages, and improving business conditions. Capitalism, thus has built-in systemic mechanisms which ensure that there will be an oversupply of labor, and that, therefore, the terms of sale of labor power will be favorable to capitalist exploitation.

Unemployment, then, is an essential part of the capitalist system, and with unemployment, poverty, crime, and racial and ethnic antagonisms, growing

out of the competition for jobs within the system.[6] Similar sorts of social problems also characterize other systems of class rule, but in other systems they are likely to be symptoms of malfunctioning of the system, not products of the normal working of the system.

Another contradiction within capitalism is that between the tremendous growth in the forces of production and the constriction of the ability of society to consume.

Already in 1848, before the development of automobiles, airplanes, automation, computors, and interplanatary exploration, Marx and Engels (1964: 10) noted that, "The bourgeoisie, during its rule of scarce one hundred years, has created more massive and more collosal productive forces than have all preceding generations together." This tremendous development of the productive forces of society has eliminated the scarcity basis of class rule. No longer does one class have to exploit another in order to enjoy the economic basis for a secure and abundant life.

Yet at the same time that capitalism develops society's productive forces, it simultaneously restricts the power of the masses of workers to consume. The working class does not receive enough money in wages to buy back the commodities it produces. The economic problem in mature capitalism is thus transformed from one of scarcity to one of overabundance: the worker finds that there is too much labor, not too little, and the result is unemployment and poverty; the farmer finds that he produces more food than he can sell, and has to be paid not to produce, even when millions are malnourished; the manufacturer similarly has not problem in producing, but only in selling. This contradiction between the constant expansion of society's forces of production and the constant constriction of society's ability to consume generates a powerful tendency toward stagnation in all systems of

capitalist production.

But the bourgeoisie produces something more than commodities, something more, even, than contradictions. "What the bourgeoisie therefore produces, above all," according to the Manifesto, "are its own grave-diggers," the proletariat. By breaking down the rural isolation of the peasant community and the individual homesteader, by bringing the direct producers together into cities and organizing them in larger and larger productive networks, by compelling the workers to organize themselves in self-defense against the most brutal exploitation, the bourgeoisie creates the force which is destined to change the world, the proletariat.

Before the proletariat can accomplish its historic mission, however, it must become *conscious* of this mission. But how is this possible? "The ideas of the ruling class are in every epoch the ruling ideas: i.e., the class, which is the ruling material force of society, is at the same time its ruling intellectual force" (Marx and Engels 1939:39). Given the hegenomy of bourgeois ideology, how can the proletariat become conscious of its own revolutionary powers? The answer lies in the nature of bourgeois ideology itself. For this ideology is a product not just of bourgeois rule, but more importantly of the historical conditions under which the bourgeoisie established their rule.

We must recall that the bourgeoisie is a revolutionary class which grew to maturity in opposition to feudal exploitation and oppression. As the bourgeoisie rose to the position of ruling class, it created decisive changes in consciousness and political organization which could not be turned off when they were no longer needed, but continued in opposition to bourgeois rule itself.[7] The revolutionary bourgeoisie, in other words, created a revolutionary ideology which legitimizes not bourgeois rule but proletarian revolution. There are several considerations here.

First, the development of a rational, critical social science provided the bourgeoisie with the ideological weapon to attack feudal privilege and irrationality. But as the bourgeoisie becomes a ruling class it no longer needs a materialist, critical ideology, and bourgeois ideology becomes increasingly idealistic and apologetic. Yet, once created, critical social science becomes a material force in its own right, and does not stop with the attack on feudalism, but goes on to attack bourgeois privilege and bourgeois rationality and irrationality as well.[8]

Secondly, the establishment of the institutions of parliamentary democracy enable the bourgeois to rule with the consent and participation of other, non-ruling classes.[9] But by legitimating bourgeois rule in terms of popular consent, bourgeois ideology also legitimates efforts on the part of the people to change the system.

Third, there are the basic values placed on freedom and equality. These were used to legitimate the struggle to overthrow feudalism. They continue as basic values legitimating bourgeois rule, even though they de-legitimate the unfreedom and inequality which are necessary concomitants of that rule.

Finally, the bourgeoisie raise expectations which cannot be fulfilled within the framework of bourgeois society. Consequently, capitalism generates its own ideological negation, the idea of socialism as a fulfillment of the promise of bourgeois revolution.

The above discussion of capitalism has been at a rather high level of abstraction, dealing with the capitalist system, qua system. It is important to realize, however, that the actual working out of the system on the ground involves a number of complexities which cannot be discussed here. One important point which must be made, though, is that capitalism is not a national but an international, world system.

Some scholars see the contemporary world as divided between advanced, "modern" societies which have been transformed by the Industrial Revolution, and underdeveloped, "premodern" societies which have not as yet been so transformed. Such a view, however, ignores the most elementary facts of the past five hundred years of world history. The Industrial Revolution, although it occured in Western Europe, was a world-historical phenomenon, and not just a European one. As Marx (1967) showed in his chapters on the primitive accumulation of capital, the capital which financed the Industrial Revolution came from the plunder of the non-Western world. This process certainly led to the transformation of social structures in the industrialized, Euro-American world, but it also led to the transformation of social structures in the non-Western world, as well. Through the process of what Frank (1966) called "the development of underdevelopment", the social structures of the non-Western world were rearranged to facilitate the extraction of economic surplus by the advanced nations. The result was the emergence of two kinds of modern society (or more properly, two kinds of subsystems within the larger capitalist world system), both equidistant from the feudal societies that preceded them: advanced capitalist nations, and underdeveloped nations.

Advanced capitalist nations are characterized by the presence of advanced industrial plants and advanced technology. The economic surplus takes the form, primarily, of profit, extracted from the working class through wage labor, but rent and interest are also important exploitative techniques. The class structure conforms to the classic Marxian two-class model: (1) a small, wealthy, ruling bourgeoisie which lives on income generated by property ownership, which controls production for its own profit, and controls the nation-state and key opinion forming institutions; (2) a working class, or proletariat, that lives on income derived from the sale of their labor power. Again, this

description is highly abstract, and does not include all the complexities of class structure, but the reality of this structure is not negated by the existence of gradations either within the classes or between them. The conformity of the American class structure to the Marxian model will be touched upon below.

Within the underdeveloped society, social relations are likely to appear feudal, and indigenous ruling classes are likely to rely on "precapitalist" modes of exploitation. The diagnostic feature of these social systems, however, is the penetration of the advanced capitalist exploitative system into the underdeveloped nation and the extraction therefrom of economic surplus in the form of profits and unequal trade relations. It is this feature which locks advanced and underdeveloped nations into a single, worldwide economic system.

Both advanced capitalist and underdeveloped societies, then, are social types *within* the world capitalist system, a highly unstable system marked by profound contradictions between its advanced and underdeveloped parts, as well as the material and ideological contradictions discussed above. Most imporantly, with the development of the idea of socialism, the continued existence of class rule can no longer be taken for granted, and class struggle, in underdeveloped nations as well as advanced nations, enters a new phase, toward the overthrow of class rule itself, and the building of a classless, socialist world order.

Like feudalism, then, capitalism is a system of class rule, but it is distinguished from feudalism by the facts that it is a world wide system, incorporating all of humanity into a single productive network, and that it is a highly unstable system, rent by powerful contradictions.

The material contradictions within capitalism do not mean, ipso facto,

that capitalism will collapse and socialism will emerge. Capitalism is a system of class rule, consciously manipulated by a group of human beings, the bourgeoisie, who have tremendous intellectual and material resources at their disposal to cope with the problems generated by the system and to prevent its collapse. For all its problems, then, the collapse of capitalism is not immanent.

The Marxian model, however, is a two class model. Although the bourgeoisie can possibly prevent the *collapse* of capitalism, they cannot prevent its *overthrow*. As the proletariat becomes aware of itself as a class, and of its distinct interests, vis-a-vis the bourgeoisie, in building a more rational, humane world, it will shake off bourgeois rule and emerge as a ruling class. The real forces which are destroying bourgeois rule are not simply the material contradictions of capitalism, but more importantly the forces which are bringing the proletariat to an awareness of itself and its interests: critical social science, democratic institutions, the values of freedom and equality, and the idea of socialism.

When the proletariat becomes a ruling class, it will establish its conditions of existence as the ruling conditions of society, as have all previous ruling classes. But since the conditions of life of the working class consist in its obligation to labor and its lack of special privileges, a working class revolution must abolish all special privileges and confer upon all an equal obligation to labor. The classless society of the future will build upon and perfect the positive achievements of the bourgeoisie--the high development of societies productive forces, bourgeois political freedom, and bourgeois democracy.[10] But these will be raised to new heights.

As the politico-economic basis of class rule is abolished, social evolution will return to its starting point. Class rule, the negation of the liberty, equality, and fraternity of primitive communism, will negate itself

in socialism. At this point, the motive force of historical change, class struggle, will have been eliminated and humanity will be in harmony with itself and with nature. This will be a human ecological climax in which the major adjustment to the new evolutionary force, human intelligence, will have been made, and the human ecosystem will have attained a position of maturity and stability.

SOCIALISM AS A HUMAN ECOLOGICAL CLIMAX

In the ecological interpretation of social evolution presented above, both primitive communism and class rule were explained in terms of a single causal mechanism: enlightened self-interest, or the minimax tendency. This basic mechanism, operating in the material conditions of the hunting and gathering world, led to a primitive communal social order. In the changed conditions after the development of large, sedentary, agrarian populations, the minimax tendency led to the emergence and evolution of progressively larger and more powerful systems of class rule. What, then, are the changed conditions in the contemporary industrial world that will lead to the end of class rule and the elimination of exploitation?

It is not in the interest of any majority to be exploited, and since the proletariat forms the majority of industrial society, it is clearly in its interests to prevent itself from being exploited. But, it may be objected, is it not in the interest of the majority to exploit minorities? The answer is equally clear. No, for the benefits accruing from such exploitation would be too slight to justify the costs. These include not only the cost of repressing the resistence of the minority being exploited, but also of repressing dissident members of the majority. What might happen is that a

minority within the majority might attempt to exploit a minority, but the majority would not benefit from this, and further, this would pose a threat to the majority itself, since the exploitative system used to exploit the minority could, in time, be turned against the majority, Similarly, the workers of one country would not benefit from exploiting the workers of another country.

The class interests of the proletariat, then, lie in the elimination of all exploitation. But the same could be said of a peasantry. Since the peasantry in feudal, agrarian society was not able to end exploitation, what are the special characteristics of the proletariat in industrial society which will enable it to enforce its class interest and build a non-exploitative, socialist society?

One of the important differences between a peasantry and a proletariat lies in the nature of their respective productive systems. The agrarian production of peasants is such that individual families can form productive units. A peasant revolution, therefore, merely aims at redistribution of private property rights in land. But such petty property in land merely lays the groundwork for the reemergence of class differentiation in the countryside, between rich and poor peasants, and, ultimately, between landlord and tenant. Thus, although the long range, objective interests of the peasants may lie in socialization of land and production, their immediate, perceived interests lie in obtaining private property rights in land. But such petty private property is impossible in industrial production. The worker cannot demand that ten feet of the assembly line become "his" property. The social character of production demands social, not private, ownership of the means of production. Thus, whereas a peasant revolution leads to a resurgence of petty private property, a proletarian revolution leads to social ownership of the means of production

and to socialism.

Further, there are important differences in the character of social life between a rural peasantry in feudalism and the urban proletariat in capitalism. The proletariat lives in a highly urbanized society and has access through mass communication, to advanced critiques of the system, to the most advanced ideas of social reform and revolution, and to the idea of socialism. These characteristics do not apply to the typical peasantry of feudal society, although they are increasingly characteristic of peasants in underdeveloped nations, who are thereby becoming increasingly a revolutionary force.

As discussed above, the forces which are undermining capitalism are the very forces which will aid the proletariat in building socialism. The freedom of thought, critical social science, and free press which provide the proletariat with an understanding of the shortcomings of capitalism will also enable the proletariat to discover abuses within the emerging socialist system. The free elections and democratic institutions which give the proletariat the power to overthrow capitalism also give it the power to eliminate these abuses as they are discovered. Finally, the basic values of freedom, equality, and social responsibility will reinforce the liberty, equality, and fraternity of world socialism. This is not to say that there will be no conflicts or problems in the building of socialism, only that these will not be insurmountable.

These conditions, which are developed by bourgeois society, are either non-existant or present in only rudimentary form in the precapitalist world.

What, then, are the social conditions which will prevail in the socialist world order? To begin, the forces of social production will be highly developed, and the material base will exist for an abundant life for everyone. There will be a roughly equal obligation for everyone to participate in the

system of social production, and everyone will enjoy roughly equal levels of consumption. This is not to say, however, that there will be absolute equality or sameness. Private property in articles of consumption (housing, clothing, books, leisure articles) will continue under socialism, so that individuals may freely decide for themselves what sort of life style and level of consumption they desire. One person may wish to reduce his hours of labor to the minimum, say, ten hours per week, and live in relative poverty so that he may devote himself to writing poetry, while another may desire to increase his hours of work to thirty, forty, or even fifty, so that he may enjoy a higher level of consumption. Such differentials in labor expenditure and consumption are not exploitative and are fully compatible with socialism. One should say, they are *necessary* for socialism, for they are essential for the free development of each individual's potential.

The above description of the world socialist system may appear quite utopian, especially since the average anthropologist, being a product of American culture, has a number of built-in defenses against the concept of socialism. It is impossible here to de-program these defenses in order to enourage a more objective evaluation of the feasibility of socialism, but it may be useful to discuss two of the most common objections to the theory of socialism. On the one hand, where the working class has indeed made a revolution by placing a Marxist party in power, the results have been, to many, disastrous. For many on the New Left, "the Soviety Union is the most discouraging fact in the political world" (Lynd 1967:29). On the other hand, the reforms of the New Deal and Welfare Statism have, in the eyes of many, overcome the contradictions of capitalist society, so that 20th century America is frequently seen as "post-capitalist" or even "post-Marxist".

In order to understand the contradictory nature of the social order of

socialist bloc nations, it is necessary to draw upon Trotsky's conception of the Soviet Union as a "degenerated workers' state" (see Trotsky 1972; Duetscher 1967). When the Bolsheviks were put in power by the Russian working class in the October Revolution of November, 1917, they faced problems which were not fully anticipated by Marx. First, the revolution took place in a backward rather than an advanced nation, so that the material base of socialism had not yet been built. Second, although the Russian working class was highly advanced and politically conscious, it was numerically quite small in proportion to the peasantry. Finally, the Russian revolution was immediately confronted with foreign intervention, leading to a long and devastating civil war. As a result of these particular historical circumstances, the working class destroyed itself in protecting the revolution, and the Bolshevik Party was left as a working class party without a working class. They had to act in the name of the working class in building socialism, but without a working class to keep them honest.

The continuing functional needs to extract surplus from the peasantry to invest in an industrial plant, and to protect the revolution from foreign intervention led to a despotic state organization.

The international communist movement came under control of the Russian Communist Party, and the various national Communist Parties were built as instruments of Russian foreign policy. As revolutions occurred elsewhere in the underdeveloped world, they had to come under the control of the Soviet Union in order to remain viable in the face of capitalist hostility. The result was the emergence of a pseudo-socialist Soviet "imperialism".

Trotsky's analysis, with suitable modifications, can be applied equally well to other societies, such as China and Cuba, where socialist revolutions have occurred in the context of underdevelopment. These societies should

properly be seen as protosocialist states, part of a world transition to socialism but unable, on their own, to complete the transition until the advanced capitalist nations join them. Protosocialist states, then, are "socialist" to about the same extent that the advanced capitalist nations are "democratic". Both systems are contradictory, living up to their promises in some respects, sorely deficient in others. Marxism can point with pride to the very real achievements of the Soviet Union, for example, in economic growth, but need not take the blame for the very real shortcomings which resulted from particular historical circumstances. A worker's revolution in the United States will not face the same insurmountable problems faced by the Russian workers in 1917; when socialism comes to America it will be a more humane and happier socialism.

A number of scholars have argued that, although Marx's critique of 19th century capitalism contained a good deal of truth, capitalism has changed since Marx's time and these changes have had the effect of overcoming the contradictions of capitalism which Marx saw as leading to its downfall. In this view, the advanced industrial nations of the 20th century have become post-capitalist and post-Marxist, even post-modern.[12]

This view has little merit. Contemporary capitalism is no less capitalistic than before, but there has been a shift from a primarily competitive capitalism to monopoly capitalism.

Marx's critique of the capitalist system was based upon a model of competitive capitalism, but even in Marx's time, strong elements of monopoly were beginning to appear and, in the 20th century, these have grown so strong as to dominate the system. As Baran and Sweezy (1966) demonstrate, the inner dialectic of monopoly capitalism differs from competitive capitalism but monopoly capitalism, even more so than competitive capitalism, has profound

tendencies toward crisis and stagnation. The means by which these tendencies are overcome, most notably defense spending, only make the system more contradiction-ridden and irrational, however much this may be obscured by general feelings of euphoria.[13] Rather than attempt to summarize Baran and Sweezy's analysis here, I shall examine a related point.

One aspect of the "post-capitalist" argument is that the American worker has become bourgeois, concerned only with owning his own home and care and not at all concerned with making a revolution. In a sense, of course, this is true, but it fails to take into account the vital distinction between class consciousness and objective class position. Although the consciousness of the working class may be conservative or even reactionary at present (but even this is debatable), this can change extremely rapidly. What is important is the objective position of the working class, for this will determine, in the final analysis, its role in history; and the objective position of the American working class indicates that it is not merely ripe but overripe for revolution.[14]

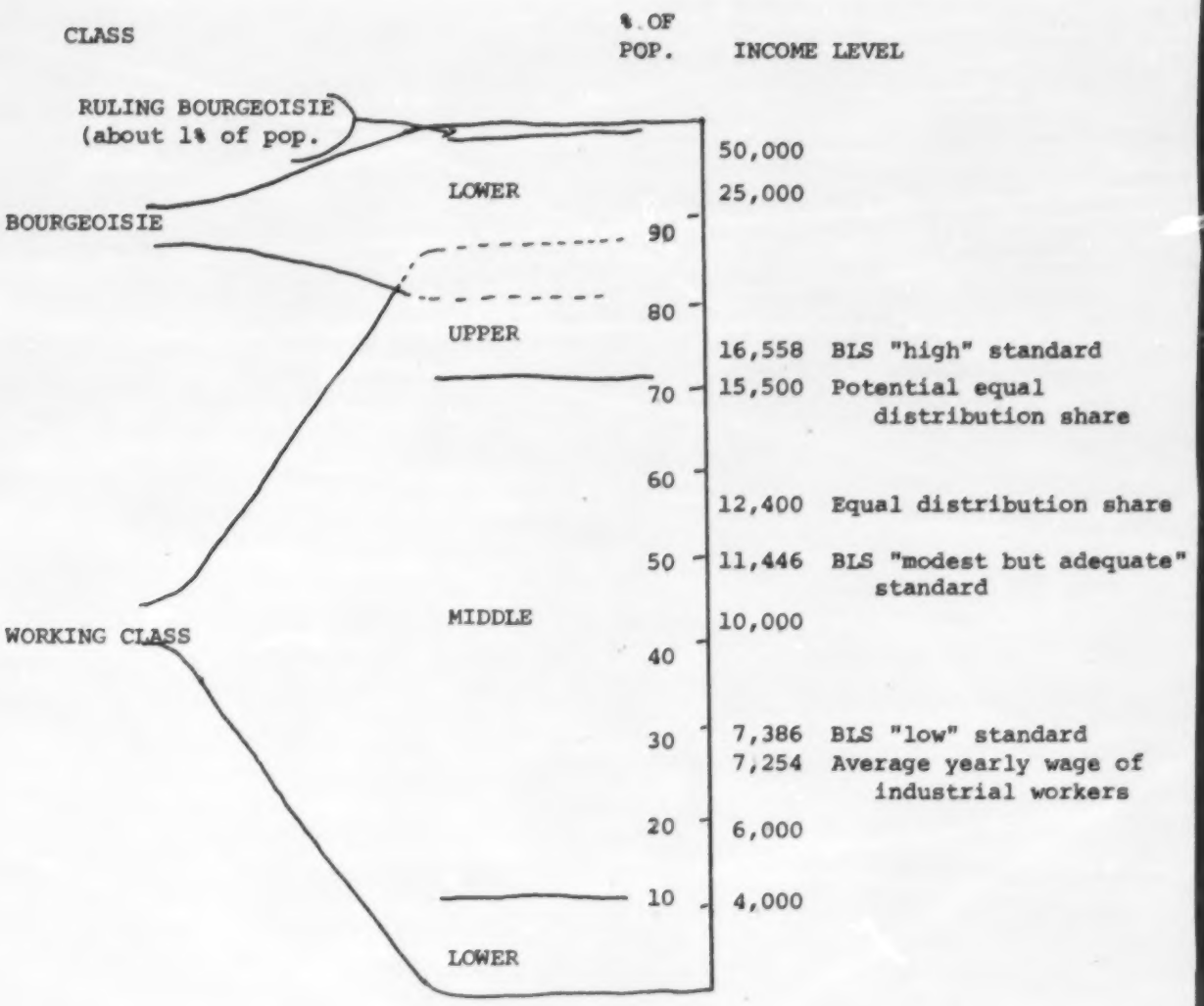
The concept of the proletariat centers on the relationship of this class to the means of production. A proletarian is anyone who receives most of his income as wages or salary--the source of one's income is more important than the amount. Ownership of articles of consumption--one's own home, automobile, T.V., stereo, etc.--in no way alters one's basic class affiliation. All proletarians share in common a lack of independent rights of access to the means of production, a lack of control over the conditions of their labor, and a need to sell their labor power in order to exist. It is these characteristics that make the proletariat a revolutionary class and it is these characteristics which define a major portion of the American population. The percentage of wage and salary employees (i.e. proletarians) in the United States labor

force rose from 20 percent in 1780 to 62 percent in 1880 to 83.6 percent in 1969, while the percentage of self-employed entrepreneurs (mostly farmers) fell from 80 percent in 1780 to 36.9 percent in 1880 to 9.2 percent in 1969 (Edwards, Reich, and Weiskopf 1972:175). Monopoly capitalism, then, furthers the process of proletarianization of the population. Over 80 percent of the American population is in the working class; when this class decides to make a revolution, it will not face the same kinds of problems which confronted the Russian working class in 1917.

It is sometimes argued that the American worker is so affluent that he has no interest in revolution. This argument, besides ignoring the fact that labor unions are continually demanding higher wages, ignores the actual distribution of income in the United States. Figure 2 shows the percentage of American families in various income levels in 1972, and compares this with the income needed to maintain various living standards as computed by the Bureau of Labor Statistics. About 30 percent of American families receive less than the $7,386 which the BLS feels is necessary for a family of four to subsist (this was compiled for use by Public Housing and Public Assistance authorities); about 50 percent receive less than the BLS "modest but adequate" standard of $11,446; and only about 25 percent receive more than the BLS highest standard of $16,558. Significantly, however, if available income were simply equally divided, this would give every family about $12,400, well above the moderate standard, and if the potential income (if unused productive plants, unemployed labor and labor employed directly or indirectly in defense were all used in producing useful wealth) were equally divided, this would give every family about $15,500, slightly less than what the BLS says is needed for their highest standard.

Thus, if we assume that socialism would provide full employment and

Figure 2. Class Structure in Contemporary Capitalism (1972).



Sources: Bloom and Northrup 1973:328; Brackett 1973:70; Bureau of the Census 1973:3; Matles and Higgins 1974:5.

that income would be equally divided in a socialist society, we can see that about 70 percent of the population--and this probably includes nearly all the working class--would financially benefit from a socialist transformation. When we further consider the better health insurance and social security measures in existing socialist systems, the economic benefits of a socialist transformation become great indeed.

Another consideration concerns job security. The fear of losing one's job is endemic throughout the working class, as some of our highly paid aerospace engineers have recently learned. A socialist society which guaranteed employment to everyone would clearly be in the economic interests of the entire working class.

The above considerations apply primarily to workers--it is they who would primarily benefit, in economic terms, from a socialist transformation. But other classes, which might be economically worse off under socialism--primarily capitalists and managers--as well as workers would find compensating benefits, both material and non-material, in socialism.

Take, for example, personal security. The problem of law and order affects everyone, rich and poor, in our society, and it is quaite clear that most of the violent crime in our society is bred by unemployment and poverty.[15] A socialist transformation, in eliminating the source of most crime, would benefit everyone.

Or take war. Modern wars are generated by capitalism and its agent, the nation-state. Abolish these, establish a world socialist government, and you have the precondition for world peace.

Or take the problem of environmental pollution and destruction. These too, are caused by capitalism. They occur because they are profitable, and being prifitable, they create jobs, so that both capitalist and workers have

an "interest" in the destruction of our "spaceship earth". But this is true only if the capitalist system is taken for granted. Abolish capitalism, eliminate the profit motive, guarantee everyone a job, and you create the preconditions for the solution of our ecological problems (cf. Commoner 1976, Weisberg 1971).

A final but extremely important consideration is that the existing social order is simply unable to command the respect of a large proportion of our population or to provide any meaning to their lives. This is seen in a variety of phenomena, from widespread alcoholism and drug abuse to the new religious cults. A socialist transformation would give the nation a sense of purpose and thereby provide a sense of meaningfulness which is largely lacking in contemporary society.

Thus, although monopoly capitalism does provide its members with more commodities than any other extant social system, it also fails to provide the sort of meaningful material and emotional satisfactions that could really command the allegiance of an informed people.

If this kind of analysis were to become widely disseminated and accepted, the overwhelming majority of the world's population would choose to live under socialism rather than continue to die a living death under capitalism.

CONCLUDING REMARKS

There is little point in trying to summarize what is already a highly abstract and summary statement. Le me, then, conclude with a few observations.

In speaking of the inexorable movement toward socialism, I do not mean to imply that this will occur independently of human activity. Culture does not evolve because of mysterious "laws", but rather because of the real life

activity of human beings in pursuit of their own ends. Socialism exists as a potentiality inherent in capitalism and bourgeois rule, but the transformation of this potentiality into an actuality requires the conscious activity of human beings. Socialism cannot come into existence until the majority of the world's population wants it. It is this fact that makes the scientific study of socialism important not only for anthropological theory, but also for anthropological practice.

If indeed we are concerned about the welfare of our "natives", and if indeed we feel that our "natives" themselves should play a role in defining their welfare, then it is incumbant upon us to study socialism very seriously, for this is what the "natives" are doing. Perhaps, further, we should not be content with study, but should also explore how we can facilitate the birth of the new world order. Perhaps, if the ideas expressed in this essay are correct, we should ask whether applied anthropology is not socialist revolution?

NOTES

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[1]This framework is an elabroation of ideas presented earlier (Ruyle 1973, 1975, 1977a, 1977c). A fuller discussion of these ideas is now in preparation (Ruyle 1977d).

[2]The desirability of the exploiter niche is described by Smith (1966: 135):

> To know the exalted pleasures of power, and the grace of refined taste with the means of satisfying it; to believe oneself superior on the only evidence that gives conviction--the behavior of others; and to enjoy all this as birthright, with no vitiating struggle, nor any doubt that one's privileges are for God, King, country and the good of one's fellow man--what happier condition, for a few, have men devised?

[3]Marx (1969:90), in discussing the Asiatic state, calls our attention to the dual nature of the state, as an agency of oppression and of government:

> There have been in Asia, generally, from immemorial times, but three departments of Government: that of Finance, or the plunder of the interior; that of War, or the plunder of the exterior; and, finally, the department of Public Works.

[4]The role of the Church in social control appears to be well understood by the Catholic Church, as the following quotes indicate:

> Pope Leo XIII: God has divided the government of the human race between two authorities, eccesiastical and civil,

establishing one over things divine, the other over things human (quoted by White 1959:303).

Pope Benedict XV: Only too well does experience show that when religion is banished, human authority totters to its fall. . . when the rullers of the people disdain the authority of God, the people in turn dispise the authority of men. There remains, it is true, the usual expedient of suppressing rebellion by force, but to what effect? Force subdues the bodies of men, not their souls (quoted by White: 1959:325).

[5]This usage of the term feudalism is broader than that of either orthodox historians, who use the term to apply to a particular form of organization within the ruling class, marked by lord-vassal ties, or Marxist historians, who use the term to refer to a mode of extracting surplus, from serfs, as opposed to Slave Society or Asiatic Society. My usage includes both the slave systems of Greece and Rome, and the Asiatic empires, as well as the "true" feudalism of medieval Europe.

[6]Marx (1953:506) describes this process of competition leading to racial and ethnic antagonisms as follows:

Every industrial and commerical center in England now possesses a working class divided into two hostile camps, English proletarians and Irish proletarians. The ordinary English worker hates the Irish worker as a competitor who lowers his standard of life. In relation to the Irish worker he feels himself a member of the ruling nation and so turns himself into a tool of the aristocrats and capitalists of his country against Ireland, thus strengthening their domination over himself. He cherishes

religious, social, and national prejudices against the Irish worker. His attitude toward him is much the same as that of the "poor white" to the "niggers" in the former slave states of the U.S.A. The Irishman pays him back with interest in his own money. He sees in the English worker at once the accomplice and stupid tool of the English domination of Ireland.

[7]Marx and Engels (1939:40-41) described this process as follows:

> For each new class which puts itself in the place of one ruling before it, is compelled, merely in order to carry through its aim, to represent its interest as the common interest of all the members of society, put in an ideal form; it will give its ideas the form of university, and represent them as the only rational, universally valid ones. The class making a revolution appears from the very start, merely because it is opposed to a *class*, not as a class but as the representative of the whole of society; it appears as the whole mass of society confronting the one ruling class. . . .Every new class, therefore, achieves its hegemony only on a broader basis than that of the class ruling previously, in return for which the opposition of the non-ruling class against the new ruling class later develops all the more sharply and profoundly. Both these things determine the fact that the struggle to be waged against this new ruling class, in its turn, aims at a more decided and radical negation of the previous conditions of society than could all previous classes which sought to rule.

[8]As Schumpeter (1966:143) observes:

> Capitalism creates a critical frame of mind which after having destroyed the moral authority of so many other institutions, in the end turns against its own; the bourgeois finds to his amazement that the rationalist attitude does not stop at the credentials of kings and popes but goes on to attack private property and the whole scheme of bourgeois values.

[9]Engels (1972:158) discusses the role of democratic institutions as follows:

> The possessing class rules directly by means of universal suffrage. As long as the oppressed class--in our case, therefore, the proletariat--is not yet ripe for its self-liberation, so long will it, in its majority, recognize the existing order of society as the only possible one and remain politically the tail of the capitalist class, its extreme left wing. But in the measure in which it matures towards its self-emancipation, in the same measure it constitutes itself as its own party and votes for its own representatives, not those of the capitalists. Universal suffrage is thus the gauge of the maturity of the working class. It cannot and never will be anything more in the modern state, but that is enough. On the day when the thermometer of universal suffrage shows boiling-point among the workers, they as well as the capitalists will know where they stand.

[10]I have discussed some of the social features which might characterize the socialist order of the future elsewhere (Ruyle 1977b).

[11]Marx's vision here is quite anthropological, and similar to that of the father of American Anthropology, Lewis Henry Morgan (1964:467):

> The time which has passed away since civilization began is but a fragment of the past duration of man's existence; and but a fragment of the ages yet to come. The dissolution of society bids fair to become the termination of a career of which property is the end and aim; because such a career contains the elements of self-destruction. Democracy in government, brotherhood in society, equality in rights and privileges, and universal education, foreshadow the next higher plane of society to which experience, intelligence and knowledge are steadily tending. It will be a revival, in a higher form, of the liberty, equality and fraternity of the ancient gentes.

[12]The following is a typical expression of this point of view:

> To an overwhelming degree American society has controlled its internal class, radical and psychological strains. With social controls ranging from terrorism to welfare, the country has moved far in the direction of "one-dimensional society" Herbert Marcuse describes. Almost everyone develops a vested interest of some kind in the American system as a whole, and within the system there are virtually no legitimate places from which to launch a totla opposition movement (Hayden, Frucher, and Cheuse 1966:270-271, cf. Harris 1968:230).

[13]Considerable study is necessary in order to understand the application of Marxian analysis to contemporary America, see, on Marx's analysis itself, Sweezy (1968), on the application of the Marxian framework to contemporary

America, Baran and Sweezy (1966); on the American ruling class, Domhoff (1967), on American imperialism, Magdoff (1969), on the history of the American working class, Boyer and Morais (1970), Brecher (1972), Lens (1973) or Foner (1947-65). For a brief, eloquent critique of American capitalism, see Oglesby (1966).

[14]On this point, Marx and Engels observed:

> If socialist writers attribute this world-historical role to the proletariat, this is by no means, as critical criticism assures us, because they regard the proletarians as *gods*. On the contrary. Since the fully formed proletariat represents, practically speaking, the completed abstraction from everything human, even from the *appearance* of being human; since all the living conditions of contemporary society have reached the acme of inhumanity in the living conditions of the proletariat; since in the proletariat man has lost himself, although at the same time he has both acquired a theoretical consciousness of this loss and has been directly forced into indignation against this inhumanity by virtue of an inexorable, utterly unembellishable, absolutely imperious *need*, that practical expression of *necessity*--because of all this the proletariat itself can and must liberate itself. But it cannot liberate itself without destroying its own living conditions. It cannot do so without destroying *all* the inhuman living conditions of contemporary society which are concentrated in its own situation. Not in vain does it go through the harsh but hardening school of *labour*. It is not a matter of what this or that proletarian or even the proletariat as a whole *pictures* at

present as its goal. It is a matter of *what the proletariat is in actuality* and what, in accordance with this *being*, it will historically be compelled to do. Its goal and its historical action are prefigured in the most clear and ineluctable way in its own life-situation as well as in the whole organization of contemporary bourgeois society. There is no need to harp on the fact that a large part of the English and French proletariat is already *conscious* of its historic task and is continually working to bring this consciousness to full clarity (from The Holy Family, in Tucker 1972:105-106, cf. Green 1971:108-127). [Emphasis in original text].

[15]As a former Attorney General observed:

Every major city in America demonstrates the relationship between crime and poor education, unemployment, bad health, and inadequate housing. When we understand this, we take much of the mystery out of crime. We may prefer the mystery. If so, we are condumned to live with crime we could prevent. . . . Poverty, illness, injustice, idleness, ignorance, human misery and crime go together. That is the truth. We have known it all along. We cultivate crime, breed it, nourish it. Little wonder we have so much (Clark 1970:11, 57, 66).

REFERENCES CITED

Baran, Paul A. and Paul M. Sweezy

1966 Monopoly Capital: An Essay on the American Economic and Social Order. New York: Monthly Review Press.

Bloom, Gordon F. and Herbert R. Northrup

1973 Economics of Labor Relations. Seventh Edition. Homewood, Illinois: Richard D. Irwin, Inc.

Boyer, Richard O. and Herbert M. Morais

1970 Labor's Untold Story. New York: United Electrical, Radio, and Machine Workers of America.

Brecher, Jeremy

1972 Strike! San Francisco: Straight Arrow Books.

Bureau of the Census

1973 Current Population Reports: Consumer Income. U.S. Department of Commerce, Bureau of the Census, Series P-60, No. 87 (June 1973). Washington, D.C.: Government Printing Office.

Clark, Ramsy

1970 Crime in America: Observations on its Nature, Causes, Prevention, and Control. New York: Simon and Schuster.

Commoner, Barry

1976 The Poverty of Power: Energy and the Economic Crisis. New York: Knopf.

Deutscher, Issac

1967 The Unfinished Revolution, Russia, 1917-1967. New York: Oxford University Press.

Diamond, Stanley

1974 In Search of the Primitive: A Critique of Civilization. New Brunswick, New Jersey: Transaction Books.

Domhoff, G. William

1967 Who Rules America? Englewood Cliffs, New Jersey: Prentice-Hall.

Edwards, Richard C., Michael Reich, and Thomas E. Weiskopf, eds.

1972 The Capitalist System: A Radical Analysis of American Society. Englewood Cliffs, New Jersey: Prentice-Hall.

Engels, Frederick

1972 The Origin of the Family, Private Property, and the State. New York: International Publishers.

Foner, Phillip

1947-65 History of the Labor Movement in the United States. 4 vols. New York: International Publishers.

Frank, Andrew Gunder

1966 The Development of Underdevelopment. Monthly Review 18(4).

Green, Gil

1971 The New Radicalism: Anarchist or Marxist? New York: International Publishers.

Harris, Marvin

1968 The Rise of Anthropological Theory. New York: Crowell.

Hayden, Tom, Norm Frucher, and Alan Cheuse

1966 Up From Irrelevance. *In* The New Radicals: A Report with Documents. Paul Jacobs and Saul Landau, eds. Pp. 267-273. New York: Vintage. (Reprinted from Studies on the Left, Vol. 5, No. 2, Spring 1965).

Kroeber, Alfred L.

1945 The Ancient Oikoumenê as an Historic Culture Aggregate. Journal of the Royal Anthropological Institute 75:9-20.

Leacock, Eleanor B.

1972 Introduction. *In* The Origin of the Family, Private Property, and the State. Frederick Engels. Pp. 7-67. New York: International Publishers.

Lee, Richard B.

1969 Eating Christmas in the Kalahari. Natural History Magazine 78(1): 14-20, 60-63.

Lens, Sidney

1973 The Labor Wars: From the Molly Maguires to the Sitdowns. Garden City, New York: Doubleday Anchor.

Lenski, Gerhard

1970 Human Societies: A Macrolevel Introduction to Sociology. New York: McGraw-Hill.

Lotka, Alfred J.

1945 The Law of Evolution as a Maximal Principle. Human Biology 17:167-194.

Lynd, Staughton

1967 What Went Wrong? Monthly Review 19(6):29-31 (November 1967).

Magdoff, Harry

1969 The Age of Imperialism: The Economics of U.S. Foreign Policy. New York: Monthly Review Press.

Mandel, Ernest

1970 Marxist Economic Theory. New York: Monthly Review Press, Vol. II.

Marx, Karl

1953 Karl Marx to S. Meyer and A. Vogt, April 8, 1870. *In* On Britain. Moscow: Foreign Language Press.

1967 Capital. New York: International Publishers, Vol. 1.

1969 The British Rule in India. *In* Karl Marx on Colonialism and Modernization. Shlomo Avineri, ed. Pp. 88-95. New York: Anchor Books.

Marx, Karl and Frederick Engels

1939 The German Ideology. New York: International Publishers.

1964 The Communist Manifesto. New York: Monthly Review Press.

Matles, James J., and James Higgins

1974 Them and Us: Struggles of a Rank and File Union. Englewwod Cliffs, New Jersey: Prentice-Hall.

McNeil, William H.

1965 The Rise of the West: A History of the Human Community. New York: Mentor.

Morgan, Lewis Henry

1964 Ancient Society. Cleveland and New York: Meridian Books, World Publishing Company.

Odum, Eugene P.

1971 Fundamentals of Ecology. Third ed. Philadelphia: Saunders.

Oglesby, Carl

1966 Liberalism and the Corporate State (Speech at the March on Washington, November 27, 1965). *In* The New Radicals: A Report with Documents. Paul Jacobs and Saul Landau, eds. Pp. 257-266. New York: Vintage.

Richardson, Peter J., and James McEvoy, III, eds.

1976 Human Ecology: An Environmental Approach. North Scituate, Mass.: Duxbury Press.

Ruyle, Eugene E.

1973 Genetic and Cultural Pools: Some Suggestions for a Unified Theory of Biocultural Evolution. Human Ecology 1:201-215.

1975 Mode of Production and Mode of Exploitation: The Mechanical and the Dialectical. Dialectical Anthropology 1:7-23.

1977a Energy and Culture. *In* The Concepts and Dynamics of Culture. Bernard Bernardi, ed. The Hague: Mouton (in press).

1977b A Socialist Alternative for the Future. *In* Cultures of the Future. 2 vols. Magoroh Maruyama, ed. The Hague: Mouton (in press).

Ruyle, Eugene E.

1977c Labor, People, Culture: A Labor Theory of Human Origins. Yearbook of Physical Anthropology. (in press)

1977d Blind Men, Elephants, and Polish Revolutionaries: An Essay on the Nature of Sociocultural Systems. Paper to be given at the 76th Annual Meeting of the American Anthropological Association, Houston, November 29-December 4.

Schumpeter, Joseph A.

1966 Capitalism, Socialism, and Democracy. London: Unwin University Books.

Smith, Thomas C.

1966 Japan's Aristocratic Revolution. *In* Class, Status, and Power: Social Stratification in Comparative Perspective. Second ed. Reinhard Bendix and Seymour Martin Lipset, eds. Pp. 135-140. New York: The Free Press.

Sweezy, Paul M.

1968 The Theory of Capitalist Development. New York: Monthly Review Press.

Trotsky, Leon

1972 The Revolution Betrayed: What is the Soviet Union and Where is it Going? New York: Pathfinder Press.

Tucker, Robert C.

1972 The Marx-Engels Reader. New York: Norton.

Weisberg, Barry

1971 Beyond Repair: The Ecology of Capitalism. Boston: Beacon.

Weaver, Thomas

1973 To See Ourselves: Anthropology and Modern Social Issues. Glenview, Illinois: Scott, Foresman.

White, Leslie A.

1959 The Evolution of Culture. New York: McGraw-Hill.